

Title (en)
Measurement of rotational velocity and torque

Title (de)
Messung der Rotationsgeschwindigkeit und des Drehmomentes

Title (fr)
Mesure de la vitesse de rotation et du couple

Publication
EP 0741286 B1 20011205 (EN)

Application
EP 96201153 A 19960426

Priority
US 43353995 A 19950502

Abstract (en)
[origin: EP0741286A2] An engine (18) delivers torque to a transmission drive shaft (12) through a flywheel (14) and a damper (16). The damper (16) includes a drive plate (30) attached to the flywheel (14) which is in turn mounted on the engine crankshaft (10). The damper (16) has two driven plates (32, 34) which are fixed on the transmission drive shaft (12). The drive plate (30) and driven plates (32, 34) have openings (48, 52, 54) for retaining springs (36, 36') through which torque is transmitted from the drive plate (30) to the driven plates (32, 34). The flywheel (14) has a plurality of arcuate segments (24) equally spaced apart around a peripheral edge to form a plurality of windows (26). One of the driven plates (32) has a plurality of radially extending fingers (56) each extending into one of the windows (26) so that gaps (26a, 26b) exist between each finger (56) and two adjacent arcuate segments (24). As torque is transmitted through the damper (16) the springs (36, 36') are compressed and the fingers (56) move in the windows (26). A single sensor (58) senses the passage of the arcuate segments (24), gaps (26a, 26b) and fingers (56) and generates an output signal which is analyzed by a microcomputer (60) to produce indications of engine RPM and torque transmitted through the damper (16).
<IMAGE>

IPC 1-7
G01L 3/04; **G01L 3/14**; **G01P 3/489**

IPC 8 full level
G01L 3/14 (2006.01); **G01P 3/489** (2006.01)

CPC (source: EP US)
F16F 15/123 (2013.01 - EP US); **F16H 59/16** (2013.01 - EP US); **G01L 3/1435** (2013.01 - EP US); **G01P 3/489** (2013.01 - EP US);
F16F 2230/0047 (2013.01 - EP US); **F16H 2059/366** (2013.01 - EP US)

Cited by
EP2166256A1; DE10138513B4; EP1169902A3; ITBO20080577A1; EP1169902A2; US10627300B2; WO2014083125A1; WO2017102112A1;
WO2013072314A1; WO2013072315A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 0741286 A2 19961106; **EP 0741286 A3 19970502**; **EP 0741286 B1 20011205**; DE 69617520 D1 20020117; DE 69617520 T2 20020613;
US 5596153 A 19970121

DOCDB simple family (application)
EP 96201153 A 19960426; DE 69617520 T 19960426; US 43353995 A 19950502